

Rationalizing Imaginary Denominators

Date _____ Period _____

Simplify.

1) $\frac{2}{8i}$

2) $\frac{3}{5i}$

3) $\frac{-5}{-5i}$

4) $\frac{-1}{-9i}$

5) $\frac{6}{-4i}$

6) $\frac{6 + 8i}{9i}$

7) $\frac{4 - 9i}{-6i}$

8) $\frac{-3 + 10i}{-6i}$

9) $\frac{-1 + 8i}{-i}$

10) $\frac{10 - 10i}{-5i}$

11) $\frac{5i}{-2 - 6i}$

12) $\frac{8i}{-1 + 3i}$

$$13) \frac{1}{-8-5i}$$

$$14) \frac{i}{-2-8i}$$

$$15) \frac{4}{-3-6i}$$

$$16) \frac{-10-5i}{-6+6i}$$

$$17) \frac{-5-9i}{9+8i}$$

$$18) \frac{-4+10i}{3+4i}$$

$$19) \frac{-5-3i}{7-10i}$$

$$20) \frac{-3-7i}{7+10i}$$

$$21) \frac{-1+i}{-5i}$$

$$22) \frac{-6-i}{i}$$

$$23) \frac{2+5i}{-i}$$

$$24) \frac{-4-4i}{4i}$$

$$25) \frac{3}{-i}$$

$$26) \frac{a}{ib}$$

Rationalizing Imaginary Denominators

Date _____ Period _____

Simplify.

1) $\frac{2}{8i}$

$$-\frac{i}{4}$$

2) $\frac{3}{5i}$

$$-\frac{3i}{5}$$

3) $\frac{-5}{-5i}$

$$-i$$

4) $\frac{-1}{-9i}$

$$-\frac{i}{9}$$

5) $\frac{6}{-4i}$

$$\frac{3i}{2}$$

6) $\frac{6+8i}{9i}$

$$\frac{-6i+8}{9}$$

7) $\frac{4-9i}{-6i}$

$$\frac{4i+9}{6}$$

8) $\frac{-3+10i}{-6i}$

$$\frac{-3i-10}{6}$$

9) $\frac{-1+8i}{-i}$

$$-i-8$$

10) $\frac{10-10i}{-5i}$

$$2i+2$$

11) $\frac{5i}{-2-6i}$

$$\frac{-i-3}{4}$$

12) $\frac{8i}{-1+3i}$

$$\frac{-4i+12}{5}$$

$$13) \frac{1}{-8-5i}$$

$$\frac{-8+5i}{89}$$

$$14) \frac{i}{-2-8i}$$

$$\frac{-i-4}{34}$$

$$15) \frac{4}{-3-6i}$$

$$\frac{-4+8i}{15}$$

$$16) \frac{-10-5i}{-6+6i}$$

$$\frac{5+15i}{12}$$

$$17) \frac{-5-9i}{9+8i}$$

$$\frac{-117-41i}{145}$$

$$18) \frac{-4+10i}{3+4i}$$

$$\frac{28+46i}{25}$$

$$19) \frac{-5-3i}{7-10i}$$

$$\frac{-5-71i}{149}$$

$$20) \frac{-3-7i}{7+10i}$$

$$\frac{-91-19i}{149}$$

$$21) \frac{-1+i}{-5i}$$

$$\frac{-i-1}{5}$$

$$22) \frac{-6-i}{i}$$

$$6i-1$$

$$23) \frac{2+5i}{-i}$$

$$2i-5$$

$$24) \frac{-4-4i}{4i}$$

$$i-1$$

$$25) \frac{3}{-i}$$

$$3i$$

$$26) \frac{a}{ib}$$

$$-\frac{ia}{b}$$